MINIMUM SPECIFICATIONS FOR PLAN LAYOUT

I COVER SHEET

A Title Block

1. Project Name (include Phase- i.e. Preliminary, Revision No., Final, As built,
2. Erosion and Sediment Control Plan or Site Plan).
3. Prepared by: _____; Checked by: _____.
4. Developer Name, Address
5. Date
6. Sheet Description (i.e. Cover Sheet, General Notes, Plan and Profile, Cross Sections, Standards Sheet, and Erosion and Sediment Control Sheet).
7. Vertical and Horizontal Scale (as applicable).
8. Sheet No ___ of ____.

B Location Map

1. 8”x8” map with border.
2. Include a minimum of 2 arterial roads or 2 waterways or 1 arterial road and 1 waterway.
3. Limits of construction shaded.
4. Property Boundary

C Index

1. Sheet No.
2. Sheet description as per “Title Block”.

D Project Title

1. 1” Height
2. Block or Bold
3. All Capitals

E Original P.E. or L.S. stamp and signature.

F Plans in CAD format

G Abridged Summary of Quantities

1. Length of street improvements.
2. Length and size of sanitary sewer mains.
3. Length and size of water mains.
4. Quantity of fire hydrants.

II GENERAL NOTES

A Summary of Quantities

1. List bid items, numbered as in contract.
2. Include Erosion and Sediment Control items (break down: i.e. Silt Fence- LF, Silt Trap- Each, etc.)
3. Include plan quantities with units.

B Typical Cross Section

1. Scale view of a representative cross section, showing ROW, Sidewalk, Curb and Gutter, Pavement, Aggregate, Mains, etc.
2. Dimensions of all above construction (except when a Detail applies).
3. Minimums and maximums of variable dimensions.
4. Show slopes of road, sidewalk, driveways and parkways (include minimums and maximums).
5. Stations where Typical Cross Section is applicable when there are 2 or more Typical Cross Sections.

C Title Block - same as in Section I-A.

D Legend

1. Representative section of line types with explanation of what line types denote
2. Symbols for monuments, new and existing.
3. Symbols for structures, new and existing.
4. Symbols for Erosion and Sediment Control items as per Virginia Erosion and Sediment Control Handbook.

III PLAN AND PROFILE SHEET

A Orientation of Plan View should have north to top or left of sheet.

B North Arrow

C Bench Mark Table

1. List all bench marks in a block.
    a. Bench Mark No.
    b. Description
    c. Station
    d. Elevation

2. Show Bench Mark on Plan View.

D Curve Data

1. Show all vertical and horizontal curves in a Curve Data Block.
2. Show Stations of P.C., P.I. and P.T.
3. Show all other needed data, i.e. R, delta, LC, e, etc.

E Plan View

1. Show R.O.W. and Property lines and easements.
2. Show existing road, structures, utilities, topography, etc.
    a. Use dashed thin lines.
    b. List sizes and types of pipe for existing mains.

3. Show proposed construction
    a. Use solid bold lines (use distinct line types for utilities).
    b. List sizes and types for proposed mains and services.
    c. Give station and offset to all structures and P.C.'s and P.T.'s on curb.
    d. List total lengths for all runs of pipe and curb.
    e. Show all dimensions for R.O.W. and back of curb from centerline.
    f. Show bench marks graphically.
    g. List dimensions for widths of new driveways (at R.O.W.) and sidewalks.
    h. Box out any proposed construction text.
    i. Illustrate grading on all proposed construction.

F Profile

1. Provide a base grid.
    a. 5 foot elevation lines should be solid bold lines.
    b. 1 foot elevation lines should be thin solid or dotted lines.
    c. 5 foot elevation lines should have elevation labeled.
    d. Stations should be solid bold lines.

2. Show all existing water, sanitary and storm mains with structures and centerline.
    a. Use dashed thin lines.
    b. List invert elevations of structures. (Crossing conflicts should have minimum separation defined.
    c. List size and type of pipe.
    d. Show tops and bottoms of pipe.

3. Show proposed centerline and water, sanitary and storm mains with structures.
    a. Use solid bold lines (except centerline, which should be bold centerline line type.
    b. List elevations of pipe inverts and tops of manholes.
    c. List sizes and types of pipe.
    d. List rates on storm and sanitary legs of pipe.
    e. Show stations of P.C., P.I. and P.T. of vertical curves.
    f. Show tops and bottoms of pipes.

4. Title Block - same as in Section I-A.

IV CROSS SECTION SHEET

A Grid

1. Provide scaled 5'x5' grid, dot line type.
2. Label station and cross street, driveway or alley if applicable.
3. Label elevation lines of grid.
4. Show and label R.O.W.
5. List Cut and Fill for each cross section.
6. List proposed top of curb or centerline elevation.

B Existing Cross Section

1. Show cross section of R.O.W. at stations and beyond R.O.W. for cross streets, driveways and alleys.
2. Use thin solid line type.

C Proposed Cross Section

1. Show proposed cross section for limits of construction.
2. Label proposed rates on driveway entrances.
3. Show full cross section views of road, sidewalk, driveways and curb.
4. Use bold solid line type.

D Title Block - as per section I-A.

V EROSION AND SEDIMENT CONTROL SHEET

A Narrative

1. Project Description: Briefly describes the nature and purpose of the land disturbing activity and the area (in acres) to be used.
2. Existing Site Conditions: A description of the existing topography, vegetation and drainage.

3. Adjacent Areas: A description of neighboring areas such as streams, lakes, residential areas, roads, etc.., which might be affected by the land disturbance.
4. Off-site Areas: Describe any off-site land disturbing activities that will occur (including borrow sites, waste or surplus areas, etc..).
5. Soils: A brief description of the soils on the site giving such information as soil name, mapping unit, erodibility, permeability, depth, texture and soil structure.
6. Critical Areas: A description of areas on the site which have potentially serious erosion problems (e.g., steep slopes, wet weather/underground springs, etc.).
7. Erosion and Sediment Control Measures: A description of the methods which will be used to control erosion and sediment on the site.
8. Permanent Stabilization: A brief description, including specifications, of how the site will be stabilized after construction is completed.
9. Stormwater Runoff Considerations: Will the development site cause an increase in peak runoff rates? Will the increase in runoff cause flooding or channel degradation downstream? Describe the strategy to control storm water runoff.
10. Calculations: Detailed calculations for the design of temporary sediment basins, permanent storm water detention basins, diversions, channels, etc.. Include calculations for both predevelopment and post development runoff.

B Site Plan

1. Vicinity Map: A small map locating the site in relation to the surrounding area. Include any landmarks which might assist in locating the site.
2. Indicate North: The direction of north in relation to the site.
3. Limits of Clearing and Grading: Areas which are to be cleared and graded.
4. Existing contours: The existing contours of the site.
5. Final Contours: The changes to the existing contours, including final drainage patterns.
6. Existing Vegetation: The existing tree lines, grassed areas, or unique vegetation.
7. Soils: The boundaries of different soil types.
8. Existing Drainage Patterns: The dividing lines and the direction of flow for the different drainage areas. Include the size (in acres) of each drainage area.
9. Critical Erosion Areas: Areas with potential serious erosion problems.
10. Site Development: Show all improvements such as buildings, parking lots, access roads, utility construction, etc.
11. Location of Practices: The locations of Erosion and Sediment Control and storm water management practices used on the site. Use standard symbols and abbreviations.
    a. Explain phase of construction that each measure is needed.
    b. Explain installation procedure for each measure.

c. Explain purpose of each measure.
d. Give reference to the applicable detail on the Detail Sheet for each measure.

12. Off-Site Areas: Identify any off site land disturbing activities (e.g., borrow sites, waste areas, etc.). Show location of erosion controls. (Is there sufficient information to assure adequate protection and stabilization?)
13. Maintenance: A schedule of regular inspections and repair of erosion and sediment control structures should be set forth.

C Title Block - as per section I-A.

VI DETAIL SHEET

A Show standard details for all structures, services, planting, etc. included in construction.

B Show standard details for all applicable Erosion and Sediment Control measures.

C Show standard details for applicable Traffic Control and Protection measures.

D Title Block - as per section I-A.